at least one electrical trace having a first terminal end in electrical communication with the at least one conductive element and a second terminal end in electrical communication with a peripheral region; and

a cap attached to the substrate inside the peripheral region having upper and side walls that encapsulate the at least one conductive element and the movable MEMS element.

6. (Once Amended) The MEMS structure as recited in claim 1, wherein the at least one electrical trace is selected from the group consisting of doped polysilicon, and a metal.

10. (Once Amended) The MEMS structure as recited in claim 1, wherein the at least one electrical trace is disposed within an interface between the at least one conductive element and the substrate.

11. Cancelled

12. Cancelled

13 Cancelled

31. (Once Amended) A MEMS structure disposed within a peripheral region comprising:

a substrate;

a movable MEMS element having outer ends permanently connected to the substrate, and a middle portion connected between the outer ends and free from the substrate;

a stationary conductive MEMS element in mechanical communication with the substrate and disposed adjacent the movable MEMS element, wherein a gap is disposed between the middle portion and the stationary conductive MEMS element; and

a cap attached to the substrate having upper and side walls that encapsulate the stationary conductive MEMS element and the movable MEMS element.

32. (Once Amended) The MEMS structure as recited in claim 31, wherein the cap separates the MEMS structure from the peripheral region, the MEMS structure further comprising:

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at least one electrical trace having a first terminal end in electrical communication with the stationary conductive MEMS element and a second terminal end in electrical communication with the peripheral region.

35. Cancelled

38. (Once Amended) A MEMS structure surrounded by a peripheral region, the MEMS structure comprising:

a substrate;

at least one stationary conductive element that is in mechanical communication with the substrate;

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a movable MEMS element disposed adjacent the at least one stationary conductive element, and having outer ends permanently connected to the substrate, and a middle portion connected between the outer ends and free from the substrate; and

at least one electrical trace having a first terminal end in electrical communication with the at least one stationary conductive element and a second terminal end in electrical communication with the peripheral region.

39. (Once Amended) The MEMS structure as recited in claim 38, further comprising a cap attached to the substrate inside the peripheral region having upper walls and side walls that encapsulate the at least one stationary element and the movable MEMS element.

41. (Once Amended) A MEMS structure surrounded by a peripheral region, the MEMS structure comprising:

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a substrate extending along a lateral direction;

first and second stationary conductive elements in mechanical communication with the substrate;

a movable MEMS element disposed laterally adjacent the stationary conductive elements, and having outer ends permanently connected to the substrate, and a middle portion connected between the outer ends and free from the substrate; and

first and second electrical traces having first terminal ends in electrical communication with the first and second stationary elements, respectively, and having second terminal ends in electrical communication with the peripheral region.

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42. (Once Amended) The MEMS structure as recited in claim 41, further comprising a cap attached to the substrate inside the peripheral region having upper walls and side walls that encapsulate the stationary conductive elements and the movable MEMS element.

Please add the following new claims to the present application.

47. (New) A MEMS structure comprising:

a substrate;

at least one conductive element that is in mechanical communication with the substrate and that extends therefrom;

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a movable MEMS element having a portion that is free from the substrate and positioned such that a gap separates the movable MEMS element from the at least one conductive element;

at least one electrical trace having a first terminal end in electrical communication with the at least one conductive element and a second terminal end in electrical communication with a peripheral region; and

a cap attached to the substrate inside the peripheral region having upper and side walls that encapsulate the at least one conductive element and the movable MEMS element,

wherein the at least one electrical trace is disposed within an electrically insulating interface between the at least one conductive MEMS element and the substrate.

48. (New) The MEMS structure as recited in claim 47 wherein the interface prevents any portion of the at least one electrical trace from being in electrical communication with the substrate.

49. (New) The MEMS structure as recited in claim 47 wherein the interface layer comprises one of silicon dioxide and silicon nitride.

50. (New) The MEMS structure as recited in claim 47 wherein the movable MEMS element has outer ends permanently connected to the substrate, wherein the portion free from the substrate is connected between the outer ends.

51. (New) The MEMS structure as recited in claim 47 wherein the gap is a variable-sized gap that extends substantially parallel to the substrate.

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52. (New) A MEMS structure comprising:

a substrate;

at least one stationary conductive element that is in mechanical communication with the substrate and that extends therefrom;

a movable MEMS element having outer ends permanently connected to the substrate and a middle portion connected between the outer ends that is free from the substrate and positioned such that a gap separates the movable MEMS element from the at least one conductive element;

at least one electrical trace having a first terminal end in electrical communication with the at least one stationary conductive element and a second terminal end in electrical communication with a peripheral region; and

a cap attached to the substrate inside the peripheral region having upper and side walls that encapsulate the at least one stationary conductive element and the movable MEMS element.

53. (New) The MEMS structure as recited in claim 52, wherein the gap is a variable-sized gap that extends substantially parallel to the substrate.

54. (New) The MEMS structure as recited in claim 52, wherein the cap is non-conductive.

55. (New) The MEMS structure as recited in claim 54, wherein the cap is selected from the group consisting of glass, high resistivity silicon, crystalline sapphire, and ceramic.

56. (New) The MEMS structure as recited in claim 52, wherein the cap is conductive.

57. (New) The MEMS structure as recited in claim 56 wherein the cap is selected from the group consisting of silicon and metal.

58. (New) The MEMS structure as recited in claim 52, wherein the electrical trace is selected from the group consisting of doped polysilicon, and a metal.

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59. (New) The MEMS structure as recited in claim 58, wherein the metal is selected from the group consisting of tungsten, titanium, nickel, and alloys thereof, and aluminum, copper, silver, and gold.

60. (New) The MEMS structure as recited in claim 52, wherein a bottom surface of at least one of the side walls of the cap is attached to the substrate.

61. (New) The MEMS structure as recited in claim 52, wherein the sidewalls are connected to the substrate at a location between first and second terminal ends of the at least one electrical trace.

62. (New) The MEMS structure as recited in claim 52, wherein the at least one electrical trace is disposed within an interface between the at least one conductive element and the substrate.

63. (New) The MEMS structure as recited in claim 52 wherein the substrate comprises a nonconductive material.

64. (New) The MEMS structure as recited in claim63, wherein a portion of the at least one electrical trace is in electrical communication with the substrate.

65. (New) The MEMS structure as recited in claim 52, wherein the substrate comprises a conductive material.

66. (New) The MEMS structure as recited in claim 52, wherein the substrate further comprises a recess formed in the upper surface thereof.

67. (New) The MEMS structure as recited in claim 66, wherein the movable MEMS element is disposed above and substantially aligned with the recess.

68. (New) The MEMS structure as recited in claim 52, wherein the movable MEMS element comprises at least one conductive member attached to a nonconductive base.

69. (New) The MEMS structure as recited in claim 68, wherein the nonconductive base is selectively etchable from the conductive member.

70. (New) The MEMS structure as recited in claim 68 wherein the nonconductive base comprises one of silicon dioxide and silicon nitride.

71. (New) The MEMS structure as recited in claim 52, wherein the substrate is selected from the group consisting of high resistivity silicon, crystalline sapphire, glass and ceramic.

72. (New) The MEMS structure as recited in claim 52 wherein the substrate is selected from the group consisting of silicon, silicon carbide, gallium arsenide, and metal.

73. (New) The MEMS structure as recited in claim 52, wherein the at least one conductive element is selected from the group consisting of silicon, silicon carbide, and gallium arsenide.

74. (New) A MEMS structure disposed within a peripheral region comprising:

a substrate;

a stationary element extending from the substrate;

a movable MEMS element having a portion that is free from the substrate and positioned adjacent the stationary element such that a variable-sized gap extends substantially parallel to the substrate and separates the movable MEMS element from the stationary element; and

a cap attached to the substrate having upper and side walls that encapsulate the movable MEMS element and the stationary element.

75. (New) The MEMS structure as recited in claim 74, further comprising at least one electrical trace having a first terminal end in electrical communication with the stationary element and a second terminal end in electrical communication with the peripheral region.

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76. (New) The MEMS structure as recited in claim 74, further comprising

a second stationary element extending from the substrate and disposed adjacent the movable MEMS element; and

a second electrical trace having a first terminal end in electrical communication with the second stationary element and a second terminal end in electrical communication with the peripheral region.

77. (New) The MEMS structure as recited in claim 76, wherein the stationary elements are electrically isolated from each other.

78. (New) The MEMS structure as recited in claim 74, wherein the stationary element is conductive.

79. (New) The MEMS structure as recited in claim 74, wherein the movable MEMS element further comprises at least two conductive elements.

80. (New) The MEMS structure as recited in claim 79, wherein the at least two conductive elements are electrically isolated from each other.

81. (New) A MEMS structure surrounded by a peripheral region, the MEMS structure comprising:

a substrate;

at least one stationary element that is in mechanical communication with the substrate;

a movable MEMS element having a portion that is free from the substrate and positioned adjacent the stationary element such that a variable-sized gap extends substantially parallel to the substrate and separates the movable MEMS element from the stationary element; and

at least one electrical trace having a first terminal end in electrical communication with the at least one stationary element and a second terminal end in electrical communication with the peripheral region.

82. (New) The MEMS structure as recited in claim 81, wherein the movable MEMS element defines outer ends that are permanently attached to the substrate, and wherein the portion that is free from the substrate is connected between the outer ends.

83. (New) The MEMS structure as recited in claim 81, further comprising a cap attached to the substrate inside the peripheral region having upper walls and side walls that encapsulate the at least one stationary element and the movable MEMS element.

84. (New) The MEMS structure as recited in claim 83, wherein the second terminal end extends outside the cap.

85. (New) A MEMS structure surrounded by a peripheral region, the MEMS structure comprising:

a substrate;

first and second stationary elements in mechanical communication with the substrate;

a movable MEMS element having a portion that is free from the substrate and positioned adjacent the stationary elements such that first and second variable-sized gaps extend substantially parallel to the substrate and separate the movable MEMS element from the first and second stationary elements, respectively; and

first and second electrical traces having first terminal ends in electrical communication with the first and second stationary elements, respectively, and having second terminal ends in electrical communication with the peripheral region.

86. (New) The MEMS structure as recited in claim 85, wherein the movable MEMS element defines outer ends that are permanently attached to the substrate, and wherein the portion that is free from the substrate is connected between the outer ends.

87. (New) The MEMS structure as recited in claim 85, further comprising a cap attached to the substrate inside the peripheral region having upper walls and side walls that encapsulate the stationary elements and the movable MEMS element.

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88. (New) The MEMS structure as recited in claim 87, wherein the second terminal ends extend outside the cap.

89. (New) The MEMS structure as recited in claim 88, wherein the second terminal ends are electrically isolated from each other.

90. (New) The MEMS structure as recited in claim 85, wherein the movable MEMS element further comprises at least two conductive elements.

91. (New) The MEMS structure as recited in claim 90, wherein the at least two conductive elements are electrically isolated from each other.

92. (New) A MEMS structure comprising:

a first underlying substrate;

a second substrate forming 1) at least one conductive element that is in mechanical communication with the substrate and that extends therefrom, and 2) a movable MEMS element having a portion that is free from the substrate and that defines a variable sized gap with respect to the at least one conductive element; and

a third substrate different than the first substrate defining a wafer-level cap having a base that is in mechanical communication with the first substrate so as to encapsulate the movable MEMS element.

93. (New) The MEMS structure as recited in claim 92, further comprising at least one electrical trace having a first terminal end in electrical communication with the at least one conductive element and a second terminal end in electrical communication with a peripheral region.

94. (New) The MEMS structure as recited in claim 93, wherein the at least one electrical trace is embedded in a layer disposed between the first and second substrates.

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95. (New) The MEMS structure as recited in claim 94, wherein the layer is insulating.

96. (New) The MEMS structure as recited in claim 92, wherein the variable-sized gap extends substantially parallel to the first substrate.

97. (New) The MEMS structure as recited in claim 92, wherein outer ends of the second substrate are connected to the first substrate, and wherein a middle portion of the second substrate is connected between the outer ends and free from the first substrate.